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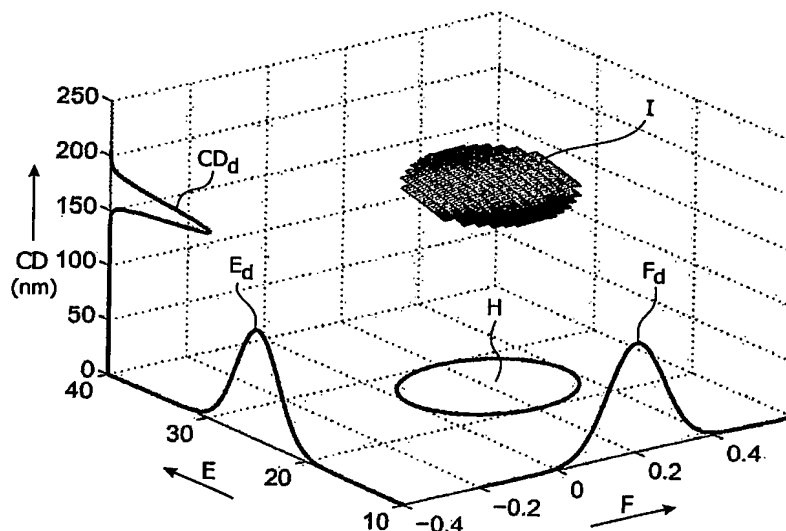
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(54) Title: A METHOD OF DETERMINING BEST PROCESS SETTING FOR OPTIMUM PROCESS WINDOW OPTIMIZING PROCESS PERFORMANCE DETERMINING OPTIMUM PROCESS WINDOW FOR A LITHOGRAPHIC PROCESS



(57) Abstract: For determining best process variables (E, F, W) setting that provide optimum process window for a lithographic process for printing features having critical dimensions (CD) use is made of an overall performance characterizing parameter ( $C_{pk}$ ) and of an analytical model, which describes CD data as a function of process parameters, like exposure dose (E) and focus (F). This allows calculating of the average value ( $\mu CD$ ) and the variance ( $\sigma CD$ ) of the statistical CD distribution (CDd) and to determine the highest  $C_{pk}$  value and the associated values of process parameters, which values provide the optimum process window.

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